



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,413	09/28/2006	Joachim J. Kahlert	PHUS040178US3	6122
38107	7590	11/06/2009	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			NGO, CHUONG A	
P. O. Box 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2617	
MAIL DATE		DELIVERY MODE		
11/06/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/599,413	KAHLERT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CHUONG A. NGO	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 September 2009.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
  - 4a) Of the above claim(s) 2,3 and 5 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,4,6-25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

**DETAILED ACTION**

1. In view of the appeal brief filed on September 22, 2009, PROSECUTION IS HEREBY REOPENED. The rejection is withdrawn and a new office action will be mailed set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/NICK CORSARO/

Supervisory Patent Examiner, Art Unit 2617.

2. This Office Action is in response to the Applicants' communication filed on September 22, 2009. In virtue of this communication, claims 1-26 are currently presented in the instant application. Claims 1, 7 and 18 are amended and claims 2, 3, 5 are cancelled.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4, 6-11, 14-16, 18, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6359587 (hereinafter Sugiura) in view of US Patent Application Public 20040023649 (hereinafter Bing).

Regarding claims 1, 9, 18, Sugiura discloses “A communications system” (**see col. 12, Fig. 4**) comprising:

Sugiura discloses “a plurality of mobile wireless units movably located within a defined space of a wireless local area network” (**see col. 12, lines 65-67, Fig. 4, Sugiura discusses plurality of mobile wireless units as radiocommunication system, therefore, it has plurality of mobile units**);

Sugiura discloses “a plurality of fixed access points disposed at known locations in the defined space (**see col. 14, lines 36-51, and Fig. 2, Sugiura discusses plurality of fixed access points as base stations 202, 203, 204 respectively having radio zones 205, 206, 207**);

Sugiura discloses “a means for tracking movement of at least one mobile device within the defined space” (**see col. 18, Lines 40-67, col. 19, lines 1-7**) including:

Sugiura discloses “a memory storing a map of the access points and relative signal strengths of signals from the access points at predefined locations in the defined space” (**col. 8, Lines 33-54**),

Sugiura discloses “a means for scanning identified scanning frequencies of access points nearby a selected one of the mobile wireless units to measure actual signal strengths between the selected mobile units” (**col. 18, Lines 40-67, col. 19, Lines 1-7**) and Sugiura discloses “each of the nearby access points” (**col. 18, Lines 40-67, col. 19, Lines 1-7**), and

Sugiura discloses “a means for calculating a location of the selected mobile relative to the map by comparing the actual signal strengths with the map of relative signal strengths at predefined locations in the defined space” (**see col. 10, lines 34-52**);

Sugiura discloses “a means for assigning the nearby access points with strongest signals to at the calibrated location to the selected mobile unit based on the map of relative strengths in the defined space and communicating the dedicated frequencies of the nearby access points to the selected mobile unit” (**see col. 28, Lines 17-39, Sugiura discusses the calibrated location as learning the signal strength related to a plurality base stations**);

Sugiura discloses “wherein the tracking means tracks the movement of the selected mobile unit by periodically scanning the frequencies of the assigned access points adjacent the calculated location and predicts future locations of the selected mobile unit” (**see col. 28, lines 58-67**);

Sugiura discloses “wherein the assigning means assigns the nearby access points based on the predicted location of the selected mobile unit and the map” (**see col. 14, Lines 52-67**);

Sugiura discloses “wherein the scanning means only scans the frequencies of the assigned nearby access points.” (**See col. 16, Lines 21-40, Sugiura discuses scanning as detection function**).

Although, Sugiura does not explicitly discloses “each access point operating at a dedicated frequency different from the dedicated frequency of its nearest neighbor access points”. However, attention is directed to Bing, which teaches “each access point operating at a dedicated frequency different from the dedicated frequency of its nearest neighbor access points” (**see paragraph [0027]**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to modify the Sugiura invention, and have each access point operating at a dedicated frequency different from the dedicated frequency of its nearest neighbor access points, as taught by Bing, thereby, providing access methods which define the right of an individual station to access the medium are used in order to allow a number of stations to access a shared transmission medium in communications systems of any desired type, as discussed by Bing, (see paragraphs [0004]-[0010]).

Regarding claims 4, Sugiura discloses “wherein the position tracking means includes: a velocity estimating means for determining speed and direction of movement of the selected mobile unit” (**see col. 21, Lines 22-42**).

Regarding claims 6, 15, Sugiura discloses “further including: a means for determining a degree of certainty of an accuracy of the calculated location” (**see col. 8, Lines 38-58**).

Regarding claims 7, 8, 10, 11, 14, 16, 21 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed above.

5. Claims 12, 13, 17, 19, 20, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 96359587 (hereinafter Sugiura) in view of US Patent Application Public 20040023649 (hereinafter Bing) and further in view of US Patent Application Public 20040039817 (hereinafter Lee).

Regarding claim 12, Sugiura and Bing disclose all the subject matters of the claimed invention concept except for “updating the frequencies of the nearest access points as the selected mobile device changes location”. However, attention is directed to Lee, which teaches “updating the frequencies of the nearest access points as the selected mobile device changes location” (**see paragraphs [0010], [0043]**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to modify the Sugiura and Bing inventions,

and have updating the frequencies of the nearest access points as the selected mobile device changes location, as taught by Lee, thereby, providing a technique to associate itself with a new AP in order to communicate within the network, as discussed by Lee, (see paragraphs [0004]-[0008]).

Regarding claims 13, 17, 19, 20, 22, and 23, have limitations similar to those treated in the above rejection, and are met by the references as discussed above.

Regarding claims 24-25 are drawn to the apparatus corresponding to the method of using same as claimed in claim 1-23. Therefore apparatus claims 24-25 correspond to method claims 1-23, and are rejected for the same reasons of obviousness as used above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG A. NGO whose telephone number is 571-270-7264. The examiner can normally be reached on Monday through Thursday 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHUONG A NGO/  
Examiner, Art Unit 2617

/NICK CORSARO/  
Supervisory Patent Examiner, Art Unit 2617